

This listing of claims will replace all prior versions of claims in the application.

Claim 1. (original) A method of qualifying prostate cancer status in a subject comprising:

(a) measuring at least one biomarker in a sample from the subject, wherein the biomarker is selected from the group consisting of

- Marker I: having a molecular weight of about 7.808 kD
- Marker II: having a molecular weight of about 14.576 kD
- Marker III: having a molecular weight of about 2.062 kD
- Marker IV: having a molecular weight of about 7.974 kD
- Marker V: having a molecular weight of about 6.677 kD
- Marker VI: having a molecular weight of about 3.936 kD
- Marker VII: having a molecular weight of about 60.958 kD
- Marker VIII: having a molecular weight of about 5.149 kD
- Marker IX: having a molecular weight of about 5.861 kD
- Marker X: having a molecular weight of about 28.098 kD
- Marker XI: having a molecular weight of about 2.996 kD
- Marker XII: having a molecular weight of about 24.346 kD
- Marker XIII: having a molecular weight of about 6.722 kD
- Marker XIV: having a molecular weight of about 5.999 kD
- Marker XV: having a molecular weight of about 6.158 kD
- Marker XVI: having a molecular weight of about 55.785 kD
- Marker XVII: having a molecular weight of about 2.540 kD
- Marker XVIII: having a molecular weight of about 8.019 kD
- Marker XIX: having a molecular weight of about 4.658 kD
- Marker XX: having a molecular weight of about 14.703 kD
- Marker XXI: having a molecular weight of about 2.68 kD
- Marker XXII: having a molecular weight of about 3.16 kD

Marker XXIII: having a molecular weight of about 10.3 kD  
Marker XXIV: having a molecular weight of about 10.8 kD  
Marker XXV: having a molecular weight of about 12.7 kD  
Marker XXVI: having a molecular weight of about 17.9 kD  
Marker XXVII: having a molecular weight of about 2.79 kD  
Marker XXVIII: having a molecular weight of about 3.32 kD  
Marker XXIX: having a molecular weight of about 4.29 kD  
Marker XXX: having a molecular weight of about 15.9 kD  
Marker XXXI: having a molecular weight of about 16.1 kD  
Marker XXXII: having a molecular weight of about 16.3 kD, and combinations thereof, and

(b) correlating the measurement with prostate cancer status.

Claim 2. (original) The method of claim 1 further comprising:

(c) managing subject treatment based on the status.

Claim 3. (original) The method of claim 2, wherein managing subject treatment is selected from ordering more tests, performing surgery, and taking no further action.

Claim 4. (original) The method of claim 2 further comprising:

(d) measuring the at least one biomarker after subject management.

Claim 5. (original) The method of claim 1 wherein the prostate cancer status is selected from the group consisting of the subject's risk of cancer, the presence or absence of disease, the type of disease, the stage of disease and the effectiveness of treatment of disease.

Claim 6. (original) A method for differentiating between a diagnosis of prostate cancer and non-prostate cancer comprising:

(a) detecting in a subject sample an amount of at least one biomarker selected from the group consisting of:

- Marker I: having a molecular weight of about 7.808 kD
- Marker II: having a molecular weight of about 14.576 kD
- Marker III: having a molecular weight of about 2.061 kD
- Marker IV: having a molecular weight of about 7.973 kD
- Marker V: having a molecular weight of about 6.677 kD and
- Marker VI: having a molecular weight of about 3.935 kD; and

(b) correlating the amount with a diagnosis of prostate cancer or non-prostate cancer.

Claim 7. (original) A method for differentiating between a diagnosis of prostate cancer and benign prostate hyperplasia comprising:

(a) detecting in a subject sample an amount of at least one biomarker selected from the group consisting of:

- Marker VII: having a molecular weight of about 60.958 kD
- Marker VIII: having a molecular weight of about 5.148 kD
- Marker IX: having a molecular weight of about 5.860 kD
- Marker X: having a molecular weight of about 28.097 kD
- Marker XI: having a molecular weight of about 2.996 kD
- Marker XII: having a molecular weight of about 24.346 kD
- Marker XIII: having a molecular weight of about 6.722 kD
- Marker XIV: having a molecular weight of about 5.999 kD
- Marker XV: having a molecular weight of about 6.159 kD
- Marker XVI: having a molecular weight of about 55.785 kD

(b) correlating the amount with a diagnosis of prostate cancer or benign prostate hyperplasia.

Claim 8. (original) A method for differentiating between a diagnosis of prostate cancer and benign prostate hyperplasia comprising:

(a) detecting in a subject sample an amount of at least one biomarker selected from the group consisting of:

Marker XXI: having a molecular weight of about 2.68 kD

Marker XXII: having a molecular weight of about 3.16 kD

Marker XXIII: having a molecular weight of about 10.3 kD

Marker XXIV: having a molecular weight of about 10.8 kD

Marker XXV: having a molecular weight of about 12.7 kD, and

Marker XXVI: having a molecular weight of about 17.9 kD.

(b) correlating the amount with a diagnosis of prostate cancer or benign prostate hyperplasia.

Claim 9. (original) A method for differentiating between a diagnosis of organ defined prostate cancer and non-organ-defined prostate cancer comprising:

(a) detecting in a subject sample an amount of at least one biomarker selected from the group consisting of:

Marker XVII: having a molecular weight of about 2.540 kD

Marker XVIII: having a molecular weight of about 8.018 kD

Marker XIX : having a molecular weight of about 4.658kD,

and

Marker XX : having a molecular weight of about 14.703 kD; and

(b) correlating the amount with a diagnosis of organ-defined prostate cancer or non-organ-defined prostate cancer.

Claim 10. (original) A method for differentiating between a diagnosis of organ defined prostate cancer and non-organ-defined prostate cancer comprising:

(a) detecting in a subject sample an amount of at least one biomarker selected from the group consisting of:

Marker XXVII: having a molecular weight of about 2.79 kD  
Marker XXVIII: having a molecular weight of about 3.32 kD  
Marker XXIX: having a molecular weight of about 4.29 kD  
Marker XXX: having a molecular weight of about 15.9 kD  
Marker XXXI: having a molecular weight of about 16.1 kD, and  
Marker XXXII: having a molecular weight of about 16.3 kD.

(b) correlating the amount with a diagnosis of organ-defined prostate cancer or non-organ-defined prostate cancer.

Claim 11. (currently amended) The method of claim 1 any of claims 1-10 wherein the marker is detected by mass spectrometry.

Claim 12. (currently amended) The method of claim 1 any of claims 1-10 wherein the marker is detected by capturing the marker on a biochip having an affinity surface and detecting the captured marker by SELDI.

Claims 13-29. (cancelled)

Claim 30. (original) A kit for aiding the diagnosis of cancer, comprising:  
an adsorbent attached to a substrate, wherein the adsorbent retains one or more biomarkers selected from:

Marker I: having a molecular weight of about 7.808 kD  
Marker II: having a molecular weight of about 14.576 kD  
Marker III: having a molecular weight of about 2.062 kD  
Marker IV: having a molecular weight of about 7.974 kD  
Marker V: having a molecular weight of about 6.677 kD

Marker VI: having a molecular weight of about 3.936 kD  
Marker VII: having a molecular weight of about 60.958 kD  
Marker VIII: having a molecular weight of about 5.149 kD  
Marker IX: having a molecular weight of about 5.861 kD  
Marker X: having a molecular weight of about 28.098 kD  
Marker XI: having a molecular weight of about 2.996 kD  
Marker XII: having a molecular weight of about 24.346 kD  
Marker XIII: having a molecular weight of about 6.722 kD  
Marker XIV: having a molecular weight of about 5.999 kD  
Marker XV: having a molecular weight of about 6.159 kD  
Marker XVI: having a molecular weight of about 55.784 kD  
Marker XVII: having a molecular weight of about 2.540 kD  
Marker XVIII: having a molecular weight of about 8.019 kD  
Marker XIX: having a molecular weight of about 4.658 kD  
Marker XX: having a molecular weight of about 14.703 kD  
Marker XXI: having a molecular weight of about 2.68 kD  
Marker XXII: having a molecular weight of about 3.16 kD  
Marker XXIII: having a molecular weight of about 10.3 kD  
Marker XXIV: having a molecular weight of about 10.8 kD  
Marker XXV: having a molecular weight of about 12.7 kD  
Marker XXVI: having a molecular weight of about 17.9 kD  
Marker XXVII: having a molecular weight of about 2.79 kD  
Marker XXVIII: having a molecular weight of about 3.32 kD  
Marker XXIX: having a molecular weight of about 4.29 kD  
Marker XXX: having a molecular weight of about 15.9 kD  
Marker XXXI: having a molecular weight of about 16.1 kD, and  
Marker XXXII: having a molecular weight of about 16.3 kD.

Claim 31. (original) The kit of claim 30, further comprising written instructions for use of the kit for detection of cancer.

Claims 32-41. (cancelled)

Claim 42. (original) A protein purified on a biochip selected from:

- Marker I: having a molecular weight of about 7.808 kD
- Marker II: having a molecular weight of about 14.576 kD
- Marker III: having a molecular weight of about 2.062 kD
- Marker IV: having a molecular weight of about 7.974 kD
- Marker V: having a molecular weight of about 6.667 kD
- Marker VI: having a molecular weight of about 3.936 kD
- Marker VII: having a molecular weight of about 60.958 kD
- Marker VIII: having a molecular weight of about 5.149 kD
- Marker IX: having a molecular weight of about 5.861 kD
- Marker X: having a molecular weight of about 28.098 kD
- Marker XI: having a molecular weight of about 2.996 kD
- Marker XII: having a molecular weight of about 24.346 kD
- Marker XIII: having a molecular weight of about 6.722 kD
- Marker XIV: having a molecular weight of about 5.999 kD
- Marker XV: having a molecular weight of about 6.159 kD
- Marker XVI: having a molecular weight of about 55.784 kD
- Marker XVII: having a molecular weight of about 2.540 kD
- Marker XVIII: having a molecular weight of about 8.019 kD
- Marker XIX: having a molecular weight of about 4.658 kD
- Marker XX: having a molecular weight of about 14.703 kD
- Marker XXI: having a molecular weight of about 2.68 kD
- Marker XXII: having a molecular weight of about 3.16 kD

Marker XXIII: having a molecular weight of about 10.3 kD  
Marker XXIV: having a molecular weight of about 10.8 kD  
Marker XXV: having a molecular weight of about 12.7 kD  
Marker XXVI: having a molecular weight of about 17.9 kD  
Marker XXVII: having a molecular weight of about 2.79 kD  
Marker XXVIII: having a molecular weight of about 3.32 kD  
Marker XXIX: having a molecular weight of about 4.29 kD  
Marker XXX: having a molecular weight of about 15.9 kD  
Marker XXXI: having a molecular weight of about 16.1 kD, and  
Marker XXXII: having a molecular weight of about 16.3 kD.

Claim 43. (original) The purified proteins of claim 42, comprising a composition of a combination of at least two proteins.

Claims 44-77. (cancelled)